

AS2(Assignment 2, Unit 1): Data Organization

Please highlight the correct answer choice like this: **a**

1. A sample of $n = 50$ scores ranges from a high of $X = 16$ to a low of $X = 8$. If these scores are placed in a frequency distribution table, how many X values will be listed in the first column?

- a. 6
- b. 8
- c. 9
- d. 7

2. For the following frequency distribution, how many individual scores are in the entire set?

	<u>X</u>	<u>f</u>
a. $N = 4$	5	2
b. $N = 51$	4	6
c. $N = 14$	3	3
d. $N = 15$	2	4

3. For the following frequency distribution, how many individuals had a score of $X = 3$?

	<u>X</u>	<u>f</u>
a. 1	5	2
b. 2	4	4
c. 3	3	1
d. 4	2	3

4. For the following frequency distribution, what is the value of ΣX ?

	<u>X</u>	<u>f</u>
a. 9	5	2
b. 14	4	4
c. 33	3	1
d. 31	2	2

5. For the following frequency distribution of quiz scores, how many individuals took the quiz?

	<u>X</u>	<u>f</u>
a. $n = 14$	5	6
b. $n = 19$	4	5
c. $n = 71$	3	5
d. cannot be determined	2	3

6. For the following distribution of quiz scores, if a score of $X = 4$ or lower is needed for a passing grade, how many individuals passed?

	<u>X</u>	<u>f</u>
a. 16	5	6
b. 15	4	5
c. 10	3	5
d. cannot be determined	2	3
	1	2

7. What frequency distribution graph is appropriate for scores measured on a ratio scale?

- a. only a histogram
- b. only a polygon
- c. either a histogram or a polygon
- d. only a bar graph

8. What kind of frequency distribution graph is appropriate for representing data for eye color?

- a. only a histogram
- b. only a polygon
- c. either a histogram or a polygon
- d. only a bar graph

9. A mechanic recorded the type of vehicle for each vehicle in his car sale lot. If the data are presented in a frequency distribution graph, what type of graph should be used?

- a. bar graph
- b. a histogram
- c. a polygon
- d. either a histogram or a polygon

10. A researcher records the number of one family homes on each block in a one mile square area of NJ. If the results are presented in a frequency distribution graph, what kind of graph should be used?

- a. a bar graph
- b. a histogram
- c. a polygon
- d. either a histogram or a polygon

11. A soccer coach recorded the time each player took to shoot a penalty kick. If the data are presented in a frequency distribution graph, what type of graph should be used?

- a. bar graph
- b. a histogram
- c. a polygon
- d. either a histogram or a polygon

12. What kind of frequency distribution graph shows the frequencies as bars that are not separated by spaces?

- a. bar graph
- b. a histogram
- c. a polygon
- d. all of the above

13. What kind of frequency distribution graph shows the frequencies as bars, with space between adjacent bars?

- a. bar graph
- b. a histogram
- c. a polygon
- d. all of the above

14. Find each value requested for the set of scores in the following frequency distribution table.

<u>X</u>	<u>f</u>
5	1
4	4
3	3
2	5
1	7

$$n = 5 \quad \Sigma X = 15 \quad (\Sigma X)^2 = 225$$

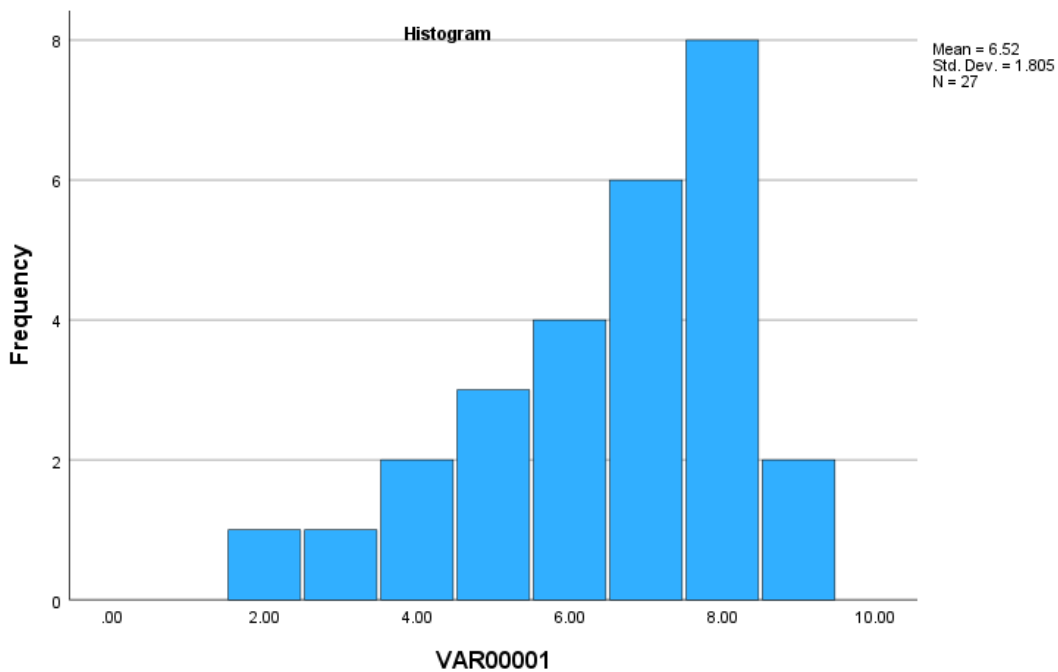
Are the data from a sample or population? Sample

15. On SPSS, please construct a frequency table and histogram for the following data:

8, 5, 6, 4, 8, 7, 2, 8, 5, 8, 9, 7, 6, 8, 7, 7, 6, 6, 4, 3, 5, 8, 9, 7, 7, 8, 8

and paste your SPSS results here:

Statistics		
VAR00001		
N	Valid	27
	Missing	0



VAR00001

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	3.7	3.7	3.7
	3.00	1	3.7	3.7	7.4
	4.00	2	7.4	7.4	14.8
	5.00	3	11.1	11.1	25.9
	6.00	4	14.8	14.8	40.7
	7.00	6	22.2	22.2	63.0
	8.00	8	29.6	29.6	92.6
	9.00	2	7.4	7.4	100.0
Total		27	100.0	100.0	

16. On SPSS: Construct a frequency table and generate the appropriate graph for the following data which represent the number of times that participants blinked in one minute:

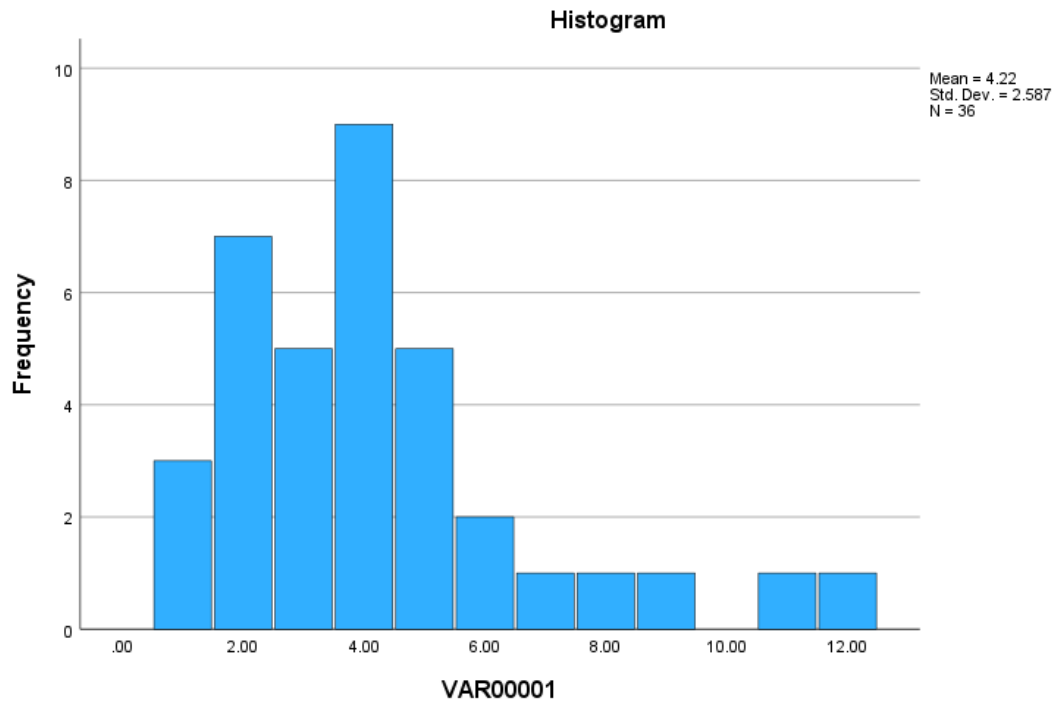
2, 3, 1, 4, 2, 5, 3, 3, 1, 2, 2, 4, 6, 5, 5, 4, 4, 4, 2, 6, 3, 7, 2, 4, 1, 2, 5, 3, 4, 4, 5, 4, 8, 9, 11, 12

VAR00001					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	8.3	8.3	8.3
	2.00	7	19.4	19.4	27.8
	3.00	5	13.9	13.9	41.7
	4.00	9	25.0	25.0	66.7
	5.00	5	13.9	13.9	80.6
	6.00	2	5.6	5.6	86.1
	7.00	1	2.8	2.8	88.9
	8.00	1	2.8	2.8	91.7
	9.00	1	2.8	2.8	94.4
	11.00	1	2.8	2.8	97.2
	12.00	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Statistics

VAR00001

N	Valid	36
	Missing	0



17. Provide the Statistical Notation for the following (you may have to use the insert symbol option on your word menu):

Mean of a population	4.22
Mean of a sample	36
Number of scores in a population	12
Number of scores in a sample	7
A raw score	36
Sum	2.587
Sum the scores	36

Sum the scores and then square the sum $(\sum x)^2 = 1,296$

Square each score and then add up the squared scores $\sum x^2 = 3,349$

18. What is the *purpose* of a frequency distribution table?

A **frequency distribution table** can help you **organize this data**. A **frequency distribution table** is a chart that summarizes values and their **frequency**. It's a useful way to organize data if you have a list of numbers that represent the **frequency** of a certain outcome in a sample.

19. Is a frequency table a descriptive or inferential method? **Descriptive**

20. The following frequency distribution is from an Introduction to Psychology class quiz. Based on the data, please answer the questions below:

<u>X</u>	<u>f</u>
9	2
7	3
6	0
5	3
4	4

What is the range of data? 4,5,6,7,8,9

How many students took the quiz? 5

How many students received a score of 5? 3

How many students received a score of 4? 4

How many students got a score higher than 6? 5

How many students got a score lower than 5? 4

$$N = 5$$

$$\Sigma X = 31$$